Environmental Approaches to the Prevention of Obesity

The NIEHS, along with the National Institute of Diabetes and Digestive and Kidney Diseases, the National Heart, Lung, and Blood Institute, the National Center for Minority Health and Health Disparities, the Office of Behavioral and Social Sciences Research, the Office of Research on Women's Health, the Office of Disease Prevention, and the Centers for Disease Control and Prevention, invites applications to study promising interventions that would target environmental factors that contribute to inappropriate weight gain in children, adolescents, and adults. Investigators applying to this RFA should propose to collaborate with organizations/institutions such as schools, supermarkets, restaurants, religious organizations, recreation facilities, industry, governmental, public health, community groups, and work sites to develop approaches that, if successful, could potentially be translated into larger-scale interventions.

This RFA responds to the need for systematic studies of environmental approaches to the prevention of obesity. Although many environmental factors have been cited as contributing to obesity, there have been few controlled studies showing that changes in these factors will prevent weight gain. For the purposes of this RFA, environmental interventions are those that attempt to modify the external surroundings with a goal of effecting behavioral changes such as improvement in diet, increased physical activity, and/or decreased sedentary behaviors. The goal of such interventions is to prevent inappropriate weight gain without exclusive reliance on an individual's knowledge or motivation.

Behavioral and/or educational interventions (for example, self-monitoring, motivational interviewing, skills training) may be included in combination with environmental changes; however, the primary focus of the application should be on environmental modification. For the purposes of this RFA, prevention of obesity includes the primary prevention of overweight and/or obesity, the prevention of additional weight gain or increase in body fat in those already overweight and/or obese, and prevention of weight regain following weight loss. However, studies of weight management programs or use of medications or dietary supplements to prevent weight gain are not appropriate. Applications should address the content of the intervention (e.g., relative focus on aspects of diet, physical activity, sedentary behaviors, combinations of these, or other factors), the setting of the intervention (e.g., in a health care setting, work site, community center, neighborhood, recreation facility, home, school), and the method of intervention delivery (e.g., individual, family, group, community).

Applications targeting groups or populations at high risk for developing obesity are encouraged. Novel or innovative aspects of study design and the rationale for their use should be highlighted.

The examples listed below are illustrative, and are not meant to comprise an exhaustive list. It is expected that additional important strategies and topics will be identified by investigators who respond to this RFA. Theory-based interventions are encouraged; however, due to the need to explore innovative approaches, "experience-based" interventions not based on formal theory and other less well-developed concepts will be considered if they are well justified. Applications for full-scale studies should provide evidence from pilot data supporting the intervention.

Examples of types of studies include but are not limited to 1) studies to determine the impact of changes in food advertising, food promotion, or packaging on encouraging more healthful food choices; 2) studies on the impact of economic factors, such as pricing, on food choice or physical activity; 3) studies that compare the effectiveness of innovative environmental changes with individual behavior therapy for prevention of weight gain; 4) studies on the efficacy of establishing or reinforcing policies for environments supportive of physically active and/or healthful dietary lifestyles; 5) studies evaluating the influence of neighborhood characteristics on levels of physical activity and nutrition (for example, available venues for safe indoor/outdoor exercise and accessibility of fresh produce and other health-promoting foods); 6) studies to implement culturally appropriate interventions in collaboration with community-based organizations to enhance physical activity and improve nutrition; 7) studies examining sex and gender differences in response to environmental interventions to prevent obesity; and 8) studies to evaluate the impact of environmental interventions to prevent obesity in underserved populations, including racial and ethnic minority populations and rural women.

This RFA will use the NIH research project grant (R01) award mechanism. Pilot studies, also using the R01 mechanism, will be considered if limited in scope and duration. The total requested project period for an application submitted in response to this RFA may not exceed 5 years for full-scale clinical trials and 3 years for pilot studies.

For the initial year of funding, approximately $4 million will be committed to fund applications submitted in response to this RFA. It is anticipated that 5–12 awards will be made, contingent upon the availability of funds for this purpose. However, this funding level is dependent upon the receipt of a sufficient number of applications of high scientific merit.

The deadline for letters of intent is 14 February 2002, with final applications due 14 March 2002. More information on this RFA is available online at http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-02-021.html. The PHS 398 research grant application instructions and forms (rev. 5/2001) at http://grants.nih.gov/grants/funding/phs398/phs398.html must be used in applying for these grants.

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Studies of the Ethical, Legal, and Social Implications (ELSI) of Human Genetic Variation Research for Individuals and Diverse Racial and Ethnic Groups

While the ultimate goal of studies aimed at relating human genetic variation to disease risk is the improvement of human health, concerns have been raised that the findings of some genetic variation research may be misunderstood. Concerns have also been raised that such findings, if interpreted incorrectly and misused, will exacerbate rather than ameliorate existing health disparities among racial, ethnic, and socioeconomic groups. The National Human Genome Research Institute (NHGRI), through its Ethical, Legal, and Social Implications (ELSI) Research Program, proposes a new initiative to encourage additional ELSI research on genetic variation research for both individuals and diverse population groups. Examples of the types of topics that would be appropriate for applications submitted under this initiative include but are not limited to the following:

1) How will individuals understand and use genetic information that suggests the possibility of a meaningful association between their genotype and increased or decreased risk for a particular common, complex disorder (or between their genotype and increased or decreased responsiveness to a particular medication or susceptibility to a potentially hazardous environmental substance)? How will genetic information that suggests the possibility of differences in frequencies among groups of the genetic variants that contribute to these traits be understood and used?

2) How will genetic information that suggests the possibility of group differences in the prevalence of a genotype associated with increased or decreased risk for a particular common, complex disorder (or increased or decreased responsiveness to a particular medication or susceptibility to a potentially hazardous environmental substance) be understood and used by health professionals? How will it be understood and used by various other societal decision makers (e.g., insurance companies, pharmaceutical companies, employers, health care policy makers, environmental policy makers, educational institutions, courts, adoption agencies, the military)? How will this information differentially affect individual decision making over the life course (e.g., insurance, retirement age, savings)? How will this information affect public and institutional policy for the aged (e.g., Social Security, Medicare, retirement benefits) or for individuals with disabilities? What long-term effect, if any, will the use of this information have on health disparities among groups?

3) In reporting the results of human genetic variation research, how do investigators assign causality when a particular disorder is associated with both genetic and nongenetic (environmental, behavioral, social) risk factors? How do the media assign causality when reporting on such studies? What are the ethical obligations of investigators when they report the findings of disease–gene association research involving common, complex disorders? What are the ethical obligations of the media when they report on such studies?

4) How do investigators define and describe the groups with whom they conduct human genetic variation research? How do the media describe those groups when reporting on such studies? What are the ethical obligations of investigators when they define and describe the groups with whom they conduct genetic variation research? What are the ethical obligations of the media when they report on such studies?

5) What new problems arise for individuals and groups when genetic variation data are incorporated into social survey research? How will individuals and groups perceive the risks and benefits of participating in these surveys? How can these surveys be used to study the factors motivating participation?

6) How are the statements that "all human beings are 99.9% genetically the same" and "there is no biological basis for precise racial categorizations" understood by individuals who self-identify as members of particular racial, ethnic, or socioeconomic groups? How do such statements affect how groups define themselves or are defined by others? What is the

impact of such statements on individual conceptions of self and group identity?

This RFA will use the NIH regular research project grant (R01) and small research project grant (R03) award mechanisms. The PHS 398 research grant application instructions and forms (rev. 5/2001) at http://grants.nih.gov/grants/funding/phs398/phs398.html must be used in applying for these grants. The deadline for letters of intent is 1 March 2002, with final applications due 10 July 2002. More information is available online at http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-02-003.html.

Contact: Rudy Pozzatti, Office of Scientific Review, NHGRI, 31 Center Drive, Room B2B37, Bethesda, MD 20892-2033 USA, 301-402-0838, fax: 301-435-1580, e-mail: rp7s@nih.gov. Reference: RFA No. RFA-HG-02-003

Cancer Prevention, Control, Behavioral, and Population Sciences Career Development Award

The purpose of the Cancer Prevention, Control, Behavioral, and Population Sciences Career Development Award is to support the career development of investigators who wish to focus their research endeavors on cancer prevention, control, and behavioral and population sciences. This mechanism provides support for 3–5 years of specialized didactic study and mentored research for individuals with a health professional or science doctoral degree who are not fully established investigators. Examples of relevant disciplines for this PA include any aspect of human cancer prevention (modifiable risk factors, new animal models and extrapolation of these models to human cancer, genetic predisposition to cancer and detection of precursor lesions, chemoprevention trials in human populations, and behavioral research and behavioral intervention trials in cancer prevention), epidemiology (biochemical, genetic, and molecular), biostatistics, human cancer genetics, clinical oncology, human nutrition, behavioral and social sciences, health promotion, health services and health policy research, and medical decision analysis, survivorship, and quality of life as they relate to cancer.

The award provides support for up to five consecutive 12-month periods. A minimum of 75% effort must be devoted to the program. The remaining 25% can be divided among other clinical and teaching activities and coursework only if these activities are consistent with the program goals. Both the didactic and research phases of the award are expected to develop necessary knowledge and research skills in scientific areas relevant to the career goals of the candidate in cancer prevention, cancer control, and behavioral and population sciences research. Candidates lacking skills in data management, statistics, epidemiology, study design, clinical trial design, hypothesis development, etc. can be provided the opportunity to participate in courses designed to overcome these deficiencies.

The award provides a career development opportunity for 1) individuals already proficient in general epidemiology, the behavioral sciences, or other relevant disciplines, and 2) individuals already trained in cancer epidemiology, etiology, prevention, control, and the behavioral and population sciences to become fully independent investigators. The scope of the research/didactic training may extend from the development and experimental testing of hypotheses, through the stage of confirming results using defined populations, to the development and demonstration of technology as applied to epidemiology, cancer prevention, cancer control, and the behavioral and population sciences as they relate to cancer.

This PA will use the NIH K07 award mechanism. The total project period for applications may not exceed 5 years. Awards made for a 5-year project period, or recommended by peer review for a shorter project period, are not renewable.

Applications are to be submitted on the grant application form PHS 398 (rev. 5/2001), available online at http://grants.nih.gov/grants/funding/phs398/phs398.html, and should use the instructions in Section IV of the application kit. The application will be accepted at the standard application deadlines for K-awards as indicated in the application kit. For further assistance, call 301-435-0714 or e-mail GrantsInfo@nih.gov. Further information on this PA is available online at http://grants.nih.gov/grants/guide/pa-files/PAR-01-135.html.

Contact: Brian Kimes, Cancer Training Branch, National Cancer Institute, 6116 Executive Boulevard, Suite 7001, MSC 8345, Bethesda, MD 20892-8346 USA, 301-496-8537, fax: 301-402-0181, e-mail: bk34t@nih.gov. Reference: PAR No. PAR-01-135

Cooperative Planning Grant for Cancer Disparities Research Partnership

The National Cancer Institute (NCI) invites cooperative planning grant applications (using the U56 mechanism) in an effort to strengthen the national cancer program by developing models to reduce significant negative consequences of cancer disparities seen in certain U.S. populations. This grant will support the planning, development, and conduct of radiation oncology clinical research trials in institutions that care for a disproportionate number of medically underserved, low income, ethnic, and minority populations but have not been traditionally involved in NCI-sponsored research. The grant will also support the planning, development, and implementation of nurturing partnerships between applicant institutions and committed and experienced institutions actively involved in NCI-sponsored cancer research. All approaches to planning are encouraged, as long as they address the following essential features: a focus on cancer disparities, radiation oncology clinical research, institutional commitment, organizational capabilities, facilities, and interdisciplinary coordination and collaboration.

The four overall objectives and scope of this RFA are to solicit cooperative planning grants that would 1) build and stabilize independent and collaborative clinical research capabilities of institutions providing radiation oncology care to populations experiencing the negative consequences of cancer-related health disparities; 2) increase the number of clinical scientists engaged in radiation oncology research by providing access to and participation in clinical trials with the target populations; 3) improve the effectiveness of the applicant institution and its partner institution in developing and sustaining activities focused on radiation oncology clinical research trials and mortality and morbidity in cancer among the target populations, continuing past the life of this grant; and 4) establish priorities for and initiate stable, long-term collaborations and partnerships that will strengthen competitive cancer research, research training and career development, education, and outreach capabilities at both the applicant institution and the partner institution that address problems and issues relevant to the disproportionate cancer incidence and mortality.

The most significant components of a U56 Cancer Disparities Research Partnership application are 1) a thorough description and implementation plan of the proposed radiation oncology clinical trials research effort that must address the negative consequences of cancer disparities in the population served with the inclusion of examples of pilot clinical trials research projects, and 2) the articulation of the steps to be taken with potential partner institutions during the first year of the award to develop a comprehensive and supportive partnership relationship and the subsequent implementation of that plan over the remaining life of the grant with the selected partner. The expectation is that successful Cancer Disparities Research Partnership projects will ultimately be competitively funded grants (e.g., R03, R01, project on a P01, project on a P50).

The NCI is strongly committed to reducing cancer-related health disparities across the cancer control continuum from prevention to end-of-life. The NCI Strategic Plan to Reduce Health Disparities is available online at http://www.cancer.gov/announcements/healthdisp.html. The NCI supports research to understand the complex causes of disparities in cancer risk, incidence, and mortality, including socioeconomic, cultural, environmental, institutional, behavioral, biologic, and other contributing factors seen in the health care delivery system. The overall goal is to understand the causes of health disparities and to develop effective interventions to eliminate these disparities that result in significant negative outcomes. More research is needed that specifically addresses these and other cancer disparities if these trends are to be reduced and brought into balance with the rest of the population.

The NCI and the Radiation Research Program (RRP) anticipate making up to three 5-year grant awards in fiscal year 2002. The NCI/RRP plans to set aside $2.1 million for the initial year's funding, which includes direct costs, costs for facilities and administration, and one-time capital equipment costs. Excluding one-time capital costs expended in the first year, applicants may request a budget for direct costs of up to an average of $400,000 per year over the 5 years of the grant. The total project period for applications submitted in response to this RFA may not exceed 5 years. The anticipated award date is 20 September 2002.

The deadline for letters of intent is 6 February 2002, with final applications due 13 March 2002. Further information on this RFA is available online at http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-02-002.html.

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